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Equip Tips

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5700 Aviation

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United States
Department of
Agriculture

Forest Service
Equipment
Development
Center-San Dimas, CA

Equipment for Aerial Identification of Raptors and Other Wildlife

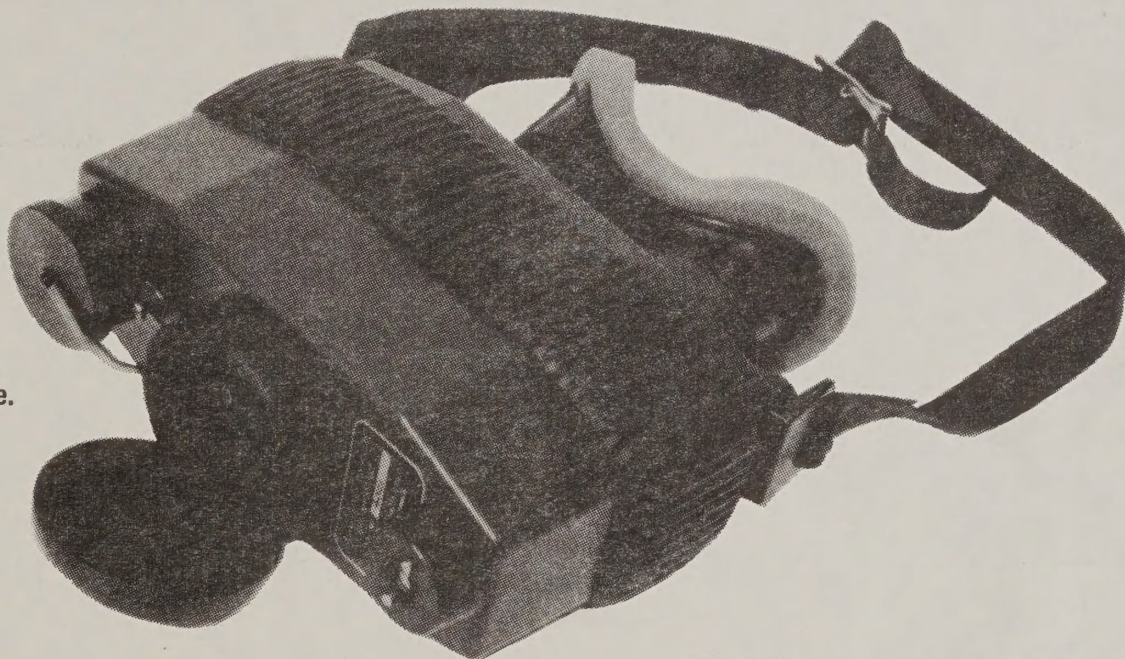


Figure 1.
BAC Steadyscope.

The identification, observation, and counting of raptor (hawks, owls, ospreys, eagles, etc.) nests, fledglings, and eggs are accomplished by Forest Service wildlife biologists as a part of the osprey-eagle recovery effort, the protection of endangered species, and wildlife management in general. The traditional way of obtaining such counts is by flying over the nest trees at an altitude of less than 500 ft above ground level (AGL) in small fixed-wing aircraft. However, this operation is in violation of Forest Service policy that requires fixed-wing, single-engine aircraft to maintain an altitude of at least 500 ft AGL. Experience has shown that from this altitude the naked eye does not have the acuity necessary for performing the required raptor observations.

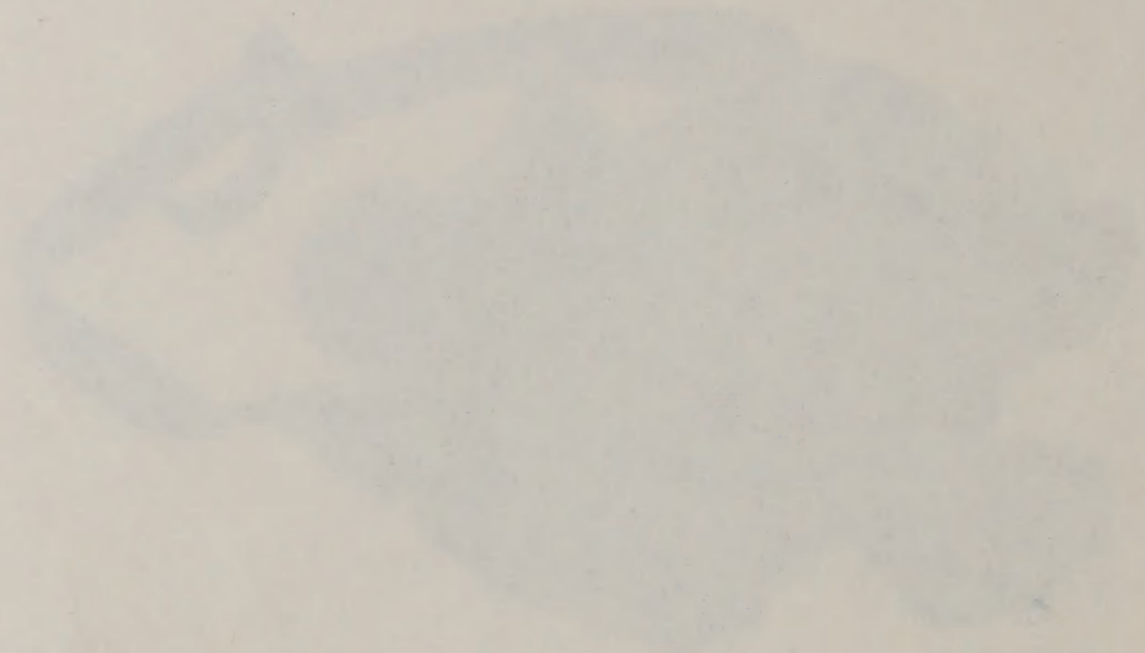
The San Dimas Equipment Development Center conducted tests to determine if a stabilized, real-time optical system is available to do the raptor observation job. Based on controlled tests of four systems, the British Aerospace Corporation (BAC) Steadyscope showed it to be superior in both target acquisition and target identification. The steadyscope is a monocular instrument. Although its body resembles conventional binoculars, one eyepiece is blanked

off. The monocular design allows for lighter optics, and thus shorter stabilization time. The example tested has a magnification of 10X with a field-of-view of 6 degrees. Stabilization is accomplished by a gimbal-mounted mirror, which is controlled by a battery-driven gyroscope. The steadyscope may be held in any attitude while in use. Power is provided by a single "D" manganese alkaline 1.5-V cell that provides 8 to 10 hours of running time. The steadyscope weighs 4.4 lb, including the battery. Inspection of the unit supports BAC's claim that the unit is a simple, rugged, and dependable device. It is in use by the military services of over 30 countries, including the United States. The test unit (fig. 1) sells for approximately \$4,900. BAC has established a sales outlet in the United States at Dulles International Airport near Washington, D.C. The address is:

INTRATEC
Division of BAC Inc.
Dulles International Airport
P. O. Box 17414
Washington, D.C. 20041

Telephone: 703/435-9100

Report of the
Commissioner of the
General Land Office
for the year 1904



The following is a list of the lands which have been
acquired by the United States during the year 1904.
The lands are listed in alphabetical order of the
States in which they are located. The list is
divided into two columns, the first column
containing the name of the land, and the second
column containing the date of acquisition. The
lands are listed in the following order: Alaska,
Arizona, California, Colorado, Connecticut,
Delaware, Florida, Georgia, Idaho, Illinois,
Indiana, Iowa, Kansas, Kentucky, Louisiana,
Maine, Maryland, Massachusetts, Michigan,
Minnesota, Missouri, Montana, Nebraska,
Nevada, New Hampshire, New Jersey, New York,
North Carolina, North Dakota, Ohio, Oklahoma,
Oregon, Pennsylvania, Rhode Island, South Carolina,
South Dakota, Tennessee, Texas, Utah, Vermont,
Virginia, Washington, West Virginia, Wisconsin,
Wyoming.